Utah

Science and Engineering Profile

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 1999[1]	4,350	518,670	32	Total R&D performance, 1998 (millions)	$1,495	$214,668	31
Doctoral engineers, 1999[1]	1,150	107,100	27	Industry R&D, 1998 (millions)	$1,109	$163,480	30
S&E doctorates awarded, 1999[1]	268	25,953	29	Academic R&D, 1998 (millions)	$249	$25,342	28
of which, in life sciences	27%	25%		of which, in life sciences	52%	57%	
in engineering	20%	21%		in engineering	23%	16%	
in physical sciences	19%	14%		in physical sciences	7%	9%	
S&E postdoctorates, 1998[1]				Public higher education current-fund			
in doctorate-granting institutions	350	39,494	26	expenditures, 1997 (millions)	$1,536	$125,236	30
S&E graduate students, 1998[1]				Number of SBIR awards, 1990-98	423	35,413	21
in doctorate-granting institutions	4,396	422,834	29	Patents issued to state residents, 1999	678	83,901	27
Population, 1999 (thousands)	2,130	276,580	35	Gross state product, 1998 (billions)	$60	$8,800	35
Civilian labor force, 1999 (thousands)	1,084	140,536	35	of which, agriculture	1%	1%	
				manufacturing, mining, construction	23%	22%	
Personal income per capita, 1999	$23,288	$28,542	41	transportation, communication, utilities	9%	9%	
				wholesale and retail trade	16%	16%	
Federal spending				finance, insurance, real estate	17%	19%	
Total expenditures, 1999 (millions)	$9,239	$1,508,933	38	services	20%	21%	
R&D obligations, 1998 (millions)	$393	$70,445	25	government	14%	12%	

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

[1]Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998

Agency	Performer							
	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total
	[In thousands of dollars]							
Total, all agencies	392,807	135,365	0	111,547	142,514	1,296	2,085	25
Department of Agriculture	13,527	8,153	0	0	5,373	1	0	36
Department of Commerce	2,293	84	0	1,502	232	0	475	32
Department of Defense	240,273	119,920	0	100,083	20,270	0	0	22
Department of Energy	8,000	0	0	865	6,800	0	335	32
Dept. of Health & Human Services	78,397	40	0	4,316	72,863	1,040	138	28
Department of the Interior	7,802	6,802	0	54	636	0	310	24
Department of Transportation	852	0	0	25	0	0	827	47
Environmental Protection Agency	1,208	0	0	70	1,138	0	0	36
National Aeronautics and Space Admin	16,306	366	0	3,919	12,021	0	0	27
National Science Foundation	24,149	0	0	713	23,181	255	0	25
State rank, total	25	19	na	26	28	48	37	na

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".